

# Integration of a Pharmacist in a Pediatric Medical Home for Children with Medical Complexity

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### What is the Beacon Program?

The Beacon Program at Children's Mercy Kansas City is a pediatric medical home for hundreds of children with medical complexity (CMC) and their siblings.

Families are cared for by a comprehensive medical team, including a clinical pharmacist.

### Why are Drug-Related Problems a Concern?

CMC require unique care, specialized attention, and benefit from a dedicated team to meet the needs of patients and caregivers.

Drug-therapy related problems in complex, chronic conditions influence financial, institutional, and patient outcomes.

### Why a Pharmacist?

- **Value-added medication services**
- Collaboration and delivery of comprehensive medication management
- **Optimize complex therapeutic regimens and patient outcomes** through evidence-based practices, medication adherence, coordination, and safety processes

### How is the Pharmacist's Care Provided?

Pharmacist is available for all appointments and meets with patients/caregivers at beginning of clinic encounters. Multiple services provided include:

1. **Comprehensive medication reconciliation** through history provided by caregiver, outpatient pharmacy review, and chart review
2. **Adverse drug assessment**

#### 3. Systemic drug-utilization review of each medication

- Drug-disease contraindication
- Drug-drug interaction
- Drug-patient precaution
- Dosing
- Duration of therapy
- Over- / underutilization
- Dosage form modification
- Adherence concerns
- Monitoring warranted

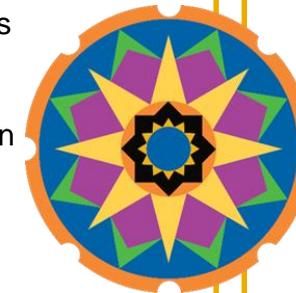
#### 4. Patient education and development of personal, family-friendly medication lists

Take These Medications	At These Times				Purpose
	8am	1pm	2pm	8pm	
GENERIC Pediasure 1.5 Ora G-Tube	1	1		1	Feeds - Managed by Beacon
Water G-Tube	120 ml(x)	120 ml(x)	120 ml(x)	120 ml(x)	Water
GENERIC Backfen 10 mg Tablet(s) G-Tube	1		1	1	Helps with tone & spasms - Managed by Rehab
Diazepam 1 mg/mL G-Tube	1	1	1	1	Helps with tone & spasms - Managed by Beacon (with neuro)
Ranitidine 15 mg/mL G-Tube	0	0	0	0	Treats acid reflux - Managed by Beacon
Cholecalciferol (Vitamin D) 400units/mL G-Tube				2	Supplements vitamin D - Managed by Beacon
Miralax® (Polyethylene Glycol 3350) 17 G-Dram(s) G-Tube				17	Relieves constipation - Managed by Beacon. 17 grams = 1 capful!

\*Utilization of MedActionPlan™

#### 5. Coordination of care

- Inpatient admissions
- Specialty services
- Home healthcare
- Prior authorization needs
- Outpatient prescriptions and pharmacies



#### 6. Medication therapy services collaborative practice

### Significance

The integration of a pharmacist in a pediatric medical home for CMC allows for:

- Innovation
  - Interdisciplinary collaboration
  - Comprehensive medication management
- Incorporation of family education and tangible medication plans promotes:
- Safe and consistent medication practices

In a pilot study consisting of 14 clinic days, 225 drug-related interventions were made; averaging to about 3 interventions per patient.